REMARKS

Reconsideration of the present application is requested. Claims 44-45 have been added. Claims 2-4, 7-15, 20-25, 29-32, 34-36, and 40-45 are pending. Support for new claim 44 may be found, for example, in paragraphs [0005-0008] and [0021-0023] of the Specification. No new matter has been added.

APPLICANTS REQUEST EXAMINER INTERVIEW PRIOR TO THE FIRST OFFICE ACTION AFTER RCE

Applicants request the Examiner contact Applicants' Representative at 703 668 8000 to schedule an interview prior to the first action after this RCE.

COMMENTS ON THE MAY 9, 2008 EXAMINER INTERVIEW

Applicants appreciate the Examiner's time in conducting a personal interview with Applicants' on May 9, 2008. As set forth in the Interview Summary dated May 9, 2008, Applicants and the Examiner primarily discussed *Croix* relative to claim 7, but also briefly discussed *Microsim* and *Optimizer*. In more detail with respect to *Croix*, Applicants and the Examiner discussed the Examiner's interpretation of *Croix*'s characterization points as the "plurality of sets of setting parameters," in claim 7.

Applicants also discussed the Examiner's rejection of claim 7 under 35 U.S.C. § 112, first paragraph. The Examiner agreed to withdraw the rejection if Applicants amended claim 7 as suggested in the May 9, 2008 Interview

Summary. However, Applicants have not done so. After re-analyzing the application and claim 7, Applicants continue to assert that claim 7 is fully in accordance with 35 U.S.C. § 112 in that the claim is sufficiently described and enabled by the specification. Therefore, Applicants do not believed such an amendment is necessary. Applicants also believe claims 2-4, 8-15, 20-25, 29-32, 34-36, and 40-45 are also in accordance with 35 U.S.C. § 112, first paragraph for similar reasons.

At the conclusion of the interview, no agreement was reached. However, the Examiner did agree to review any amendments prior to formally filing. To date, Applicants have yet to submit any amendments.

No other pertinent matters were discussed.

REJECTION UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Examiner rejects claims 2-4, 7-15, 20-25, 29-32, 34-36 and 40-43 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

Response to Examiner's Rebuttal in the March 28, 2008 Advisory Action

In the March 28, 2008 Advisory Action, the Examiner disagrees with Applicants' arguments stating (*emphasis* added):

> ...While the specification may recite each of the steps in a method, *enablement* also requires that the steps be assembled into an order that teaches performing the steps in a sequence to achieve a result. A list of disconnected steps does not appear to constitute a proper teaching.

Applicants appreciate the Examiner's comments. However, Applicants find no basis – either statutory or otherwise – for this assertion; nor has the Examiner provided any.

Importantly, it appears the focus of the Examiner's rejection has shifted from the written description requirement to the enablement requirement. As the Examiner is surely aware, 35 U.S.C. § 112, first paragraph, has three requirements: written description, enablement and best mode – each of which are separate and distinct. See, MPEP § 2161.

According to page 13 of the November 26, 2007 Final Office Action, the focus of the Examiner's rejection under 35 U.S.C. § 112 was sufficiency of the written description, without any mention of the enablement requirement. Now, the Examiner's appears to accept that the claimed invention is sufficiently described, but believes the description is not enabling to one of ordinary skill. Although Applicants believe this to be a *new* rejection, to further expedite prosecution, Applicants address this rejection as follows.

Enablement Requirement

According to MPEP § 2164.04, to reject claims under 35 U.S.C. § 112 for failing to comply with the enablement requirement, "the examiner has the *initial burden* to establish a *reasonable basis* to question the enablement provided for the claimed invention. See, also, *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993) (examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is

not adequately enabled by the disclosure). At minimum, the Examiner must "give reasons for the uncertainty of the enablement," and the "language should focus on those factors, reasons, and evidence that lead the examiner to conclude that the specification fails to teach how to <u>make and use</u> the claimed invention without <u>undue experimentation</u>, or that the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims." MPEP § 2164.04. Specific technical reasons are always required. *Id.*

The Examiner's above-quoted statement appears to be the Examiner's interpretation of what is required by 35 U.S.C. § 112, first paragraph, not specific technical reasons as to why the claims are not enabled by the specification. Absent any specific, technical reasoning, the Examiner has failed to establish a *reasonable basis* to question the enablement provided for the claimed invention.

For at least this reason, withdrawal of this rejection is requested.

Written Description

With respect to the written description requirement under 35 U.S.C. § 112, first paragraph, the Examiner carries the initial burden to establish that an adequate written description of the claimed invention is not present in the original disclosure. *In re Wertheim,* 541 F.2d at 263, 191 USPQ at 97, MPEP § 2163(II)(A). In doing so, the Examiner must present *evidence or reasons why a*

person skilled in the art would not recognize that the written description of the invention provides support for the claims. *Id.* (*emphasis* added).

On page 14 of the November 11, 2007 Final Office Action, the Examiner states:

> Regarding independent claim 7 and dependent claims, the specification does not appear to describe the complete set of limitations as in the method of claim 7. While each limitation is described in the specification, the complete process does not appear to be described. Further, the first limitation appears to be independent of the remaining limitations, which also does not appear to be described in the specification.

It appears the Examiner's evidence or "reasons," why an adequate written description is not present is that "each limitation is described in the specification," but "the complete process does not appear to be described." Final Office Action at 14. However, this statement itself is contradictory and merely conclusory, without any actual evidence in support of this conclusion.

Surely one can appreciate that if each limitation or step of a process is described, then the complete process is described. In other words, the complete process is set forth by way of the steps included therein, and thus, the fact that each step/feature/limitation is described establishes that the complete process is described.

Moreover, the "reasons" given by the Examiner (i.e., "While each limitation is described in the specification, the complete process does not appear to be described.") are merely conclusory, but not <u>evidence or reasons</u> <u>why</u> *a person skilled in the art* would not recognize that the written description of the invention provides support for the claims. In this portion of the

rejection, the Examiner fails to point to a single limitation or step in the claims that is not supported by the detailed description, let alone, provide reasons why such a feature is not supported. Absent any such reasons, one can only conclude that the Examiner believes each individual step in claim 7 is supported by the original disclosure.[1] If each individual step of claim 7 is supported by the original disclosure, the only logical conclusion is that the method of claim 7 is sufficiently supported.

Moving forward, the Examiner argues that Applicants rebuttal arguments amount to nothing more than allegations that are not supported by facts. Final Office Action at 3. Applicants disagree.

Applicants' rebuttal arguments are <u>an assertion that the Examiner has not yet met the requisite burden for overcoming the strong presumption</u> that an <u>adequate written description of the claimed invention is present when the application is filed</u> - not merely allegations without any factual support. The <u>absence of evidence</u> or reasons why one of ordinary skill would not recognize that the disclosure provides sufficient support for the claimed invention is the <u>only fact necessary</u> to support the conclusion that the Examiner has not overcome the *strong presumption* that an adequate written description of the claimed invention is present in the original disclosure.

Further with regard to claim 7, the Examiner asserts that "the first limitation [of claim 7] appears to be independent of the remaining limitations,

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[1] This is further supported by the Examiner's admission that "each limitation is described in the specification." See, Final Office Action at 14.

which also does not appear to be described in the specification." Final Office Action at 14. Applicants fail to understand this portion of the rejection.

Claim 7 is directed to a method for simulating a technical system. According to this method, a required function is optimized such that a set of setting parameters are optimized. The required function is based on the set of setting parameters and a first set of setting constants. A result is determined as a function of the set of setting parameters and based on a request to an external source, wherein the result is in the form of an influence of the set of setting parameters on the technical system. The result is temporarily stored and the technical system is simulated based on the result and the setting constants.

Given the above-discussion and claim 7 as currently set forth, the first limitation of claim 7 is *not* independent of the remaining limitations. Moreover, as described above, this limitation is sufficiently supported by the disclosure.

Further still, in the November 11, 2007 Final Office Action, the Examiner analyzes the discussion presented in Applicants' October 10, 2007 Response, which was presented to aid the Examiner in understanding the example embodiments described in the application. In particular, the Examiner appears to have searched paragraphs [0021-0026] of Applicants' Specification for *explicit recitation* of each and every sentence in Applicants' explanation. *See*, Final Office Action at 4-6.

Applicants note that the paragraphs referenced in the October 10, 2007 Response were for exemplary purposes only and should not have been relied

upon as the sole support for the claimed subject and/or Applicants' argument. Moreover, explicit recitation of the language of each claim is not absolutely necessary so long as the claimed features are supported by the disclosure, which as discussed above, is the case in this application. MPEP § 2163.02 ("The subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.").

For example, with respect to the Examiner's allegation that the "result" is in the form of both an influence of the set of setting parameters on the technical system and the influence of the setting constants, (See November 26, 2007 Final Office Action), Applicants refer the Examiner to paragraph [0008] of Applicants' Specification, which states, "the process of determining the value of the required function can be split into determination of the influence of the parameters on the technical system and determination of the influence of the setting constants on the technical system." This supports the recitation of "the result being in the form of an influence of the set of setting parameters on the technical system," as set forth in claim 7, for example.

For at least the foregoing reasons, withdrawal of this rejection is requested.

PRIOR ART REJECTIONS

Rejection under 35 U.S.C. § 103(a)

Claims 2-4, 7, 9-15, 20-25, 30-32, 34-36 and 41-43 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over "Microsim Pspice A/D & Basics+," June 1997 (*"Microsim"*) in view of U.S. Patent No. 6,327,557 (*"Croix"*) and further in view of "Microsim Pspice Optimizer," June 1997, (*"Optimizer"*). Applicants traverse this rejection.

Initially, Applicants respectfully submit that Applicants' arguments set forth in the February 26, 2008 Reply remain relevant. Applicants incorporate these arguments herein by reference, and will address the Examiner's rebuttal to those arguments below. In addition to those reasons, Applicants respectfully submit the claims are allowable over the cited art for the following reasons.

Beginning on page 17 of the November 26, 2007 Final Office Action, the Examiner correctly recognizes that *Microsim* fails to disclose or suggest at least, "simulating the technical system based on the result and the setting constants," as required by claim 7. The Examiner relies upon *Optimizer* to disclose this feature – directing Applicants' attention to pages 6-2 through 6-8. Applicants disagree.

As is evident from claim 7, "result" refers to "a result as a function of the set of setting parameters and based on a request to an external source, the result being in the form of an influence of the set of setting parameters on the technical system," as set forth in claim 7.

According to pages 6-2 through 6-8 of *Optimizer*, three variable resistors R_{Fc}, R_{Bw}, R_{Gain} are implemented as potentiometers and adjust center frequency, bandwidth, and gain of an active filter circuit shown in FIG. 6-1. In the context of *Optimizer*, results of adjustments to the variable resistors in the active filter circuit are the center frequency Fc, bandwidth BW and Gain. Contrary to the "result" of claim 7, however, the simulation of the active filter circuit in *Optimizer* is not performed *based on these results*. Therefore, contrary to the Examiner's allegation *Optimizer* does not disclose or fairly suggest at least, "simulating the technical system based on the <u>result</u> and the setting constants," as required by claim 7.

Also contrary to the "result," of claim 7, the center frequency Fc, bandwidth BW and Gain in *Optimizer* are not in the form of an influence of the variable resistors R_{Fc}, R_{Bw}, R_{Gain} on a technical system.

Croix also fails to disclose or suggest at least, "simulating the technical system based on the result and the setting constants," as required by claim 7.

For at least the foregoing reasons, claim 7 is patentable over *Microsim*, *Optimizer* and *Croix* because, even in combination, the references fail to teach or suggest all features of claim 7.

Response to Examiner's Rebuttal in the March 28, 2008 Advisory Action

In response to Applicants' previous arguments, the Examiner states, "Croix appears to teach...[in] column 10, lines 8-10...four characterization points, which is a plurality of parameters." See Continuation Sheet of Advisory

Action dated March 28, 2008. Regardless of whether this is true or not, Applicants continue to assert that the four characterization points, at most, constitute only a single set of parameters, but not a "plurality of sets of parameters," as set forth in claim 7. Therefore, the references still fail to disclose or fairly suggest determining an "influence of each of a plurality of sets of setting parameters on the technical system," by "checking the external source," as required by claim 7.

For at least the foregoing reasons, claim 7 is patentable over *Microsim* in view of *Optimizer* and further in view of *Croix*.

Claims 9, 12 and 13 are patentable over *Microsim* in view of *Optimizer* and further in view of *Croix* for at least reasons somewhat similar to those set forth above with regard to claim 7. Claims 2-4, 10, 11, 14, 15, 20-25, 30-32, 34-36, and 41-43 are patentable at least by virtue of their dependency from claims 7, 9, 12 or 13.

Additional Arguments Against the Rejection of Claim 11

In addition to the arguments set forth below, claim 11 is also patentable for the following reasons. On page 22 of the November 26, 2007 Final Office Action, the Examiner rejects claim 11 stating (**emphasis** in original):

> Microsim appears to teach determining, from the simulation of the technical system, the sensitivity of sets of parameters to changes in the setting constants **(pages 12-2 and 12-3, section Parametric Analysis; and page xiii, Chapter 13 Monte Carlo and Sensitivity/Worst-Case Analyses; and page 13-33, section Sensitivity Analysis)**.

The Examiner concludes that "it would have been obvious to determine, from the simulation of the technical system, the sensitivity of sets of parameters to changes in the setting constants." In doing so, however, the Examiner provides *no rationale*, let alone the requisite rationale, as to why such a determination would be obvious. See, MPEP § 2141(III) ("The key to supporting any rejection under 35 U.S.C. **103** is the clear articulation of the reason(s) why the claimed invention would have been obvious...[rejections] on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. [citation omitted].") Consequently, the Examiner has failed to establish a *prima facie* case of obviousness with respect to claim 11.

Sections 12-2 and 12-3 of *Microsim* discuss Parametric Analysis. According to this portion of *Microsim*, Parametric Analysis "performs multiple iterations of a specified standard analysis while varying a global parameter, model parameter, component value, or operational temperature." Section 13-33 discusses sensitivity analysis. In more detail, this portion of *Microsim* discusses an output file, which includes a percent change in a collating function and the sweep value at which the collating function is measured are given for each varied parameter. In sum, the sensitivity analysis in *Microsim* is, at most, merely an analysis of the sensitivity of the function to a parameter, which is determined by evaluating the function at plurality of values of the parameter. This portion of *Microsim*, however, is silent with regard to

determining the sensitivity of *sets of parameters* to changes *in the setting constants*. To the contrary, *Microsim*, at most, discloses determining the sensitivity of a function to changes in values of a single parameter.

Therefore, *Microsim* fails to disclose or fairly suggest at least, "determining, from the simulation of the technical system, the sensitivity of sets of setting parameters to changes in the setting constants," as required by claim 11. *Croix* and *Optimizer* are also deficient with respect to this feature.

Therefore, claim 11 is patentable over *Microsim*, *Optimizer*, and *Croix* taken singly or in combination.

Further Rejection under § 103(a)

The Examiner further rejects claims 8, 29 and 40 under 35 U.S.C. § 103(a) as unpatentable over *Microsim*, *Croix*, *Optimizer* and U.S. Patent No. 6,606,612 ("*Rai*"). Applicants traverse this rejection.

In the method of claim 8, a result is determined as a function of a set of setting parameters and based on a request to an external source. The result is in the form of an influence of the set of setting parameters on the technical system. The technical system is simulated based on the result and the setting constants. Afterward, the influence of each of a plurality of sets of setting parameters on the technical system is determined by checking the external source.

The Examiner correctly recognizes that *Microsim* and *Optimizer* fail to teach or suggest at least, determining an "influence of each of a *plurality of sets*

of setting parameters on the technical system," by "checking the external source," as required by claim 8, but relies upon *Croix* to teach this feature. As discussed above with regard to claims 7 and/or 9, however, *Croix* also fails to teach or suggest this feature.

Moreover, none of *Microsim, Optimizer,* or *Croix* disclose or fairly suggest at least, "simulating the technical system based on the result and the setting constants," as required by claim 7, and somewhat similarly by claim 8. *Rai* is also deficient with regard to this feature. Therefore, even if combined, the references fail to teach or suggest all features of claim 8.

Claims 29 and 40 are patentable by virtue of their dependency from claim 12, and for at least reasons somewhat similar to those set forth above with regard to claim 8.

NEW CLAIMS 44 AND 45

New claims 44 and 45 are also believed to be patentable over the cited art. In the least, the cited art, taken singly or in combination, fails to disclose or fairly suggest at least the following features of claim 44.

> determining a first result as a function of the set of setting constants, the first result being in the form of a first influence of the set of setting constants on the technical system;

> determining a second subsequent result as a function of the set of setting parameters and based on a request to an external source, the second result being in the form of an second influence of the set of setting parameters on the technical system, the set of setting constants being static during the evaluating, and the set of setting parameters being for design and reaction of the power station; [and]

simulating the power station based on the required function result and the setting constants.

Therefore new claims 44 and 45 are patentable over the cited art.
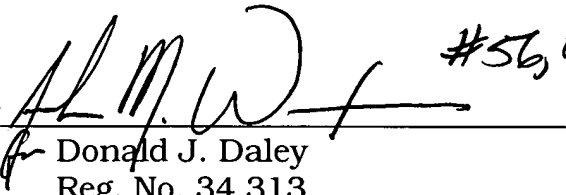
CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the pending claims in connection with the present application is earnestly solicited.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Andrew M. Waxman, Reg. No. 56,007, at the number of the undersigned listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, PLC

By _____ #56,007

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